

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-13-21
Relating to Certification of New Motor Vehicle Engines

CATERPILLAR TRACTOR COMPANY

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102, and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-3;

IT IS ORDERED AND RESOLVED: That Caterpillar Tractor Company 1978 model-year diesel-powered engines in heavy-duty motor vehicles with manufacturer's gross vehicle weight rating greater than 8500 pounds are certified for the engine family, codes and models described below:

<u>Family</u>	<u>Engine Size (CID)</u>	<u>Type</u>
9	893	Inline six-Turbocharged

Models and Engine Codes as listed in attachment.

Section 43200, Part 5, Division 26 of the California Health and Safety Code requires that the manufacturer affix a decal to the side window to the rear of the driver or, if there is no such window on the driver's side, to the windshield of the motor vehicle.

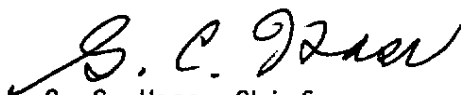
The decal shall display the applicable model year heavy-duty engine exhaust emission standards and the following recommended values:

<u>Engine Family</u>	<u>HC + NOx gm/bhp-hr</u>	<u>CO gm/bhp-hr</u>	<u>HC gm/bhp-hr</u>	<u>NOx gm/bhp-hr</u>
9	Not applicable	1	0.2	5.8

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Department of Motor Vehicles, the California Highway Patrol, and the Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California, this 28 day of November, 1977.



G. C. Hass, Chief
Vehicle Emissions Control Division

1978 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

Manufacturer Caterpillar Tractor Co. Executive Order No. A-13-21 Page 1
 Engine Family 9 Engine (CID) 893
 Emission Control Systems _____ Type I6-TC

Engine Model	Fuel Injection Pump Mfgr. Part Number	Injector Mfg. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP	Basic Initial Timing
3406	Caterpillar 9N588	Caterpillar 4N1251	325 HP @ 2100 RPM	190 mm ³ /stroke 135 lbs/hour	10° BTDC static
			300 HP @ 1950 RPM	184 mm ³ /stroke 121.5 lbs/hour	
			280 HP @ 2100 RPM	160 mm ³ /stroke 114 lbs/hour	
			255 HP @ 1950 RPM	157 mm ³ /stroke 103.5 lbs/hour	

Comments

Date of Issue

Abbreviations

Type

NA - Natural Aspiration
 TC - Turbocharged
 TCA- Turbocharged and Aftercooled

Emission Control Systems

AC - Aftercooler
 EGR - Exhaust Gas Recirculation
 TD - Throttle Delay